Questions

NAIF plans to conduct another introductory SPICE training class in the Pasadena, California area in the time frame of February or March 2013. The current target dates are March 5 through 7. Does anyone know of major problems with these dates? Have you a suggestion for another time? (Should you have comments a quick reply is needed as the dates will soon be set.)

(Re-announcement) NAIF is implementing a web-based GUI interface to SPICE, named "WebGeocalc." We plan to offer an alpha-evaluation opportunity to interested people in order to get suggestions for improvements and additional capabilities. We hope to offer this evaluation opportunity around December 1, although it might be delayed until January. One page of the tutorial named "44_development_plans" provides a bit more detail. If you wish to participate in this evaluation please send email to: charles.acton@jpl.nasa.gov

NAIF is involved in the "Geometry Project" of the International Planetary Data Alliance (IPDA). (http://planetarydata.org/) A major activity of this "project" will be to better understand how scientists and engineers do use, and would like to use, various kinds of geometry data, tools and services in their work. We anticipate shortly sending out a brief questionnaire in this regard and hope that you will take a few minutes to provide some feedback that will help guide NAIF, the Planetary Data System, and the International Planetary Data Alliance.

News

Progress on implementing the version N65 SPICE Toolkit has remained slow due to other commitments. Originally envisioned for release in April 2012, and more recently for November 2012, it now seems that its release will be sometime in the December 2012 to February 2013 time frame. We are sorry for this rather long delay.

In addition to the "WebGeocalc" capability mentioned above, we are making good progress on the digital elevation model portion of the new "Digital Shape Kernel" subsystem. The upcoming earth science Soil Moisture Active and Passive (SMAP) mission is the driver for this work, but as for all other SPICE components, the DSK will be fully multi-mission in nature. The SPICE tutorial named 45_shape_model_preview provides some details.

Work on the Java Native Interface (JNI) SPICE Toolkits is on hold, as is work on the Python toolkits. The work on JNI SPICE should be renewed early in 2013.

The IAU Commission 4 Working Group on Standardizing Access to Ephemerides has decided to adopt the SPICE SPK subsystem, with needed modifications, as its standard format for planetary ephemerides. Once the requested extensions have been implemented the SPK subsystem will be able to accommodate planetary ephemerides from the three major producers: JPL (U.S.), IAA (Russia) and IMCEE (France).

Looking Ahead

NAIF will be operating full SPICE production in support of the MAVEN and OSIRIS-REx missions, and as needed for the InSight Mars lander. NASA/GSFC and NASA/Ames will be operating SPICE production in support of the LADEE mission.

We believe ESA is considering use of SPICE on the BepiColombo, Solar Orbiter, ExoMars and JUICE missions. We believe JAXA is considering use of SPICE on Akatsuki (if Venus orbit is achieved) and on SELENE-2. We believe ISRO is planning on using SPICE on Mangalyaan—its 2013 mission to Mars. ROSCOSMOS might consider use of SPICE on ExoMars, Luna-Glob and a future mission to Jupiter. However, only officials from the mentioned space agencies can speak with authority regarding these or any other possibilities.

As seems the case for many groups involved in space exploration, NAIF's funding is shrinking somewhat. In addition, independent of financial considerations, NAIF is now facing more severe travel restrictions than in the past. As a consequence our pace of new development has slowed, and our ability to interact with international partners has been reduced. SPICE users advocating with local managers for continuing availability of SPICE capabilities to whatever extent they feel is useful is the best way to ensure the NAIF Team will be there to produce data products, provide new and improved capabilities, offer training, and answer questions.